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| 10/821,052 | 04/08/2004 | Dustin Kirkland | AUS920031009US1 | 9656 |
| <div>7590 Darcell Walker Suite 250 9301 Southwest Freeway Houston, TX 77074</div> | | | <div>EXAMINER FIGUEROA, MARISOL</div> | |
| | | | <div>ART UNIT 2617</div> | <div>PAPER NUMBER</div> |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/821,052 | Applicant(s) KIRKLAND ET AL. | |
| | Examiner Marisol Figueroa | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,10,11,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,10,11,14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/14/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (*i.e., nothing happens when the activity initially exceeds the lower threshold level, page 7 of Applicant's arguments*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Objections

2. Claims 1 and 11 are objected to because of the following informalities:

(a) On line 10 of claim 1, the term "determined calling capacity" should apparently be --determined calling activity-- because earlier in the claim the term used is the "calling activity".

(b) On line 12 of claim 11, the second term "determined calling capacity" should apparently be --determined calling activity-- because earlier in the claim the term used is the "calling activity". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. **Claims 1, 4, 5, 10, 11, 14, and 15** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the determined calling capacity" in lines 9-10. There is insufficient antecedent basis for this limitation in the claim. The Examiner notices that before, the claim recites the limitation of "determining the maximum capacity of the tower", therefore, it is believed that the limitation should be --determined maximum capacity-- instead of "determined calling capacity". The claim will be interpreted in this context.

Claim 11 recites the limitation "the determined calling capacity" in line 12. There is insufficient antecedent basis for this limitation in the claim. The Examiner notices that before, the claim recites the limitation of "determining the maximum capacity of the tower", therefore, it is believed that the limitation should be --determined maximum capacity-- instead of "determined calling capacity". The claim will be interpreted in this context.

Claim 10 recites the limitation "the determined calling capacity" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation of "a computer program product stored in a computer readable medium". However, the specification discloses (page 11, lines 8-11) that the computer readable media includes media such as "paper", and it is not clear how "paper" could be a computer readable media. In order to overcome this rejection, it is respectfully requested to amend the specification to delete "paper" as an example of a computer readable media.

Claim Rejections - 35 USC § 101

5. **35 U.S.C. 101 reads as follows:**

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 10, 11, 14, and 15** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claim 11, the claimed term "computer program product stored in a computer readable medium" is considered to include the possibility of non-statutory matter. Absent an explicit disclosure to the contrary a "computer readable medium encoded with a computer program" is normally considered to define structural and functional interrelationships between the computer program and the computer software and hardware components which permit the computer's program functionality to be realized and is thus normally statutory. Consequently, the claimed term "computer program product stored in a computer readable medium" is considered to include the possibility of non-statutory subject matter as compared to a "computer readable medium encoded with a computer program". In order to overcome this rejection, it is respectfully requested to amend the claims to recite a "computer readable medium encoded with a computer program".

With respect to claim 10, the claimed term "a software routine within the telephone tower" is considered to include the possibility of non-statutory matter.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. **Claims 1, 11, and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over GLISIC et al. (US 5,754,541) in view of SAUTER et al. (US 2004/0209623 A1).

Regarding claims 1 and 11, Glisic disclose a method (and computer program product stored in a computer readable medium) for accurately conveying wireless connection availability through a tower in a defined area comprising the steps of: determining the maximum capacity of the tower; establishing a threshold capacity level of the tower (col. 3, lines 46-52; col. 3, line 65 – col. 4, lines 1-6; col. 5, lines 31-44; the base station has an established channel capacity that is the maximum or desired capacity the base station supports, which also describe a threshold capacity); monitoring the calling activity through the tower by maintaining a constant count of the number of wireless devices that are connected through a specific tower (col. 3, lines 46-52; col. 3, line 65 – col. 4, lines 1-6; col. 5, lines 31-44; col. 5, lines 42-64; col. 7, line 65-col. 8, lines 1-5; col. 9, lines 26-30; the base station monitors continuously the load state of the traffic channel by obtaining a count on the number of active/transmitting terminals in the respective area); detecting when the calling activity has exceeded the established threshold capacity level for that tower (col. 5, lines 35-45; the load state of the traffic channel is compared with the channel capacity C and determines when the current load n of the channel is higher than the channel capacity C); and broadcasting a connection availability message to wireless devices in the area of the tower based on the detecting calling activity resulting from a maintained count of number of wireless devices connected through a specific tower (col. 3, line 45-48, col. 3, line 65 - col. 4, lines 1-10; col. 5, lines 35-44; col. 6, lines 8-11, and 22-28; the base station sends the terminal equipments information indicating whether the current channel load is lower than, equal to or higher than the channel capacity, for example a reset signal is send to the terminal

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equipments if the current load n of the channel is higher than the channel capacity C and the terminal with this received information determines if it is able to transmit or not at a particular time).

But, Glisic does not particularly disclose establishing multiple threshold capacity levels, determining a threshold level that is the closest level to the determined maximum capacity that has been exceeded by the determined calling activity, and broadcasting the connection availability message corresponding to that closest threshold level that is exceeded by the detected calling activity.

However, Sauter teaches a public land mobile network comprising a base station that establishes multiple threshold capacity levels (Figs. 1-2 and paragraph [0025]; i.e., lower (first) load threshold value and higher (second) load threshold load level) and determines a threshold level that is the closest level to the determined maximum capacity that has been exceeded by the determined calling activity and broadcast an availability message corresponding to that closest threshold level that is exceeded by the detected calling activity (paragraphs [0015], [0025]-[0029]; the network monitors the traffic (i.e., calling activity) in the cell and detects when the traffic exceeds the higher (second) load threshold value, that is considered the closest to the maximum capacity since it indicates the "beginning of congestion", and in response the network broadcast signalization to all subscribers (i.e., connection availability message) that indicates the access classes that are barred from access at that particular time).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Glisic to include the features of establishing multiple threshold capacity levels, determining a threshold level that is the closest level to the determined maximum

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capacity that has been exceeded by the determined calling activity, and broadcasting the connection availability message corresponding to that closest threshold level that is exceeded by the detected calling activity, as suggested by Sauter, since such a modification would allow the network to evaluate the degree of load in the base station based on the established thresholds and to distribute the subscriber's access to the network according to the load conditions in the base station (Abstract; paragraph [0015], [0025]).

Regarding claim 15, the combination of Glisic and Sauter disclose the computer program product as described in claim 11, in addition Sauter discloses wherein said threshold establishing instructions further comprise instructions for establishing multiple threshold levels (Figs. 1-2; paragraph [0025]).

9. **Claims 4, 5, 10, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over GLISIC et al. in view of HASSLER et al. (US 5,751,795).

Regarding claim 4 and 14, the combination of Glisic and Sauter disclose the method and program product as described in claims 1 and 11, but the combination fails to particularly disclose further comprising after said broadcasting step, the steps of receiving and displaying the broadcasted message at a wireless device in the area of the tower. However, Hassler teaches a telephone switching system that broadcast information for users, such as displayable messages, to telecommunication terminals of a plurality of users. The system forms a broadcasting message to multiple ones of the display terminals to cause the contents to be displayed (Abstract; col. 2, lines 45-59). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to further include the steps of receiving and displaying the broadcasted message (i.e., network load information) at a wireless device in the

area of the tower, as suggested by Hassler, because it would allow a plurality of users to know about the load state of the base station in a clear and reliable way, e.g., displaying information message at the wireless terminals, since it is a well known method for conveying information to users comprising communication terminals.

Regarding claim 5, the combination of Glisic, Sauter, and Hassler disclose the method as described in claims 4, in addition Sauter discloses wherein the display of the broadcasted message is a period event on the wireless device that correspond to content of the calling availability through that tower (col. 5, lines 41-44).

Regarding claim 10, Glisic discloses a system for accurately conveying wireless connection availability comprising:

a telephone tower for use in connecting wireless devices (Fig. 1; i.e., base station);

a software routine within the telephone tower, said software routine capable of maintaining a count of the number of devices that are connected through the tower (col. 3, lines 46-52; col. 3, line 65 – col. 4, lines 1-6; col. 5, lines 31-44; col. 5, lines 42-64; col. 7, line 65-col. 8, lines 1-5; col. 9, lines 26-30; the base station monitors continuously the load state of the traffic channel by obtaining a count on the number of active/transmitting terminals in the respective area), of detecting when the number of devices connected via the tower exceed a predetermined threshold level (col. 5, lines 35-45; the load state of the traffic channel is compared with the channel capacity C and determines when the current load n of the channel is higher than the channel capacity C), and of broadcasting a message to wireless devices in the area related to connection availability through that tower (col. 3, line 45-48, col. 3, line 65 - col. 4, lines 1-10; col. 5, lines 35-44; col. 6, lines 8-11, and 22-28; the base station sends the terminal equipments

information indicating whether the current channel load is lower than, equal to or higher than the channel capacity, for example a reset signal is send to the terminal equipments if the current load n of the channel is higher than the channel capacity C and the terminal with this received information determines if it is able to transmit or not at a particular time); a wireless device for use in communicating via the telephone tower (Fig. 1; i.e., terminal equipments).

But, Glisic does not particularly disclose establishing multiple threshold capacity levels, determining a threshold level that is the closest level to the determined maximum capacity that has been exceeded by the determined calling activity, and broadcasting the connection availability message corresponding to that closest threshold level that is exceeded by the detected calling activity.

However, Sauter teaches a public land mobile network comprising a base station that establishes multiple threshold capacity levels (Figs. 1-2 and paragraph [0025]; i.e., lower (first) load threshold value and higher (second) load threshold load level) and determines a threshold level that is the closest level to the determined maximum capacity that has been exceeded by the determined calling activity and broadcast an availability message corresponding to that closest threshold level that is exceeded by the detected calling activity (paragraphs [0015], [0025]-[0029]; the network monitors the traffic (i.e., calling activity) in the cell and detects when the traffic exceeds the higher (second) load threshold value, that is considered the closest to the maximum capacity since it indicates the “beginning of congestion”, and in response the network broadcast signalization to all subscribers (i.e., connection availability message) that indicates the access classes that are barred from access at that particular time). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Glisic

to include the features of establishing multiple threshold capacity levels, determining a threshold level that is the closest level to the determined maximum capacity that has been exceeded by the determined calling activity, and broadcasting the connection availability message corresponding to that closest threshold level that is exceeded by the detected calling activity, as suggested by Sauter, since such a modification would allow the network to evaluate the degree of load in the base station based on the established thresholds and to distribute the subscriber's access to the network according to the load conditions in the base station (Abstract; paragraph [0015], [0025]).

But, the combination of Glisic and Sauter fails to particularly disclose software within the wireless device for receiving and displaying broadcasted message. However, Hassler teaches a telephone switching system that broadcast information for users, such as displayable messages, to telecommunication terminals of a plurality of users. The system forms a broadcasting message to multiple ones of the display terminals to cause the contents to be displayed (Abstract; col. 2, lines 45-59). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Glisic to further include software within a wireless device for receiving and displaying the broadcasted message (i.e., network load information), as suggested by Hassler, because it would allow a plurality of users to know about the load state of the base station in a clear and reliable way, e.g., displaying information message at the wireless terminals, since it is a well known method for conveying information to users comprising communication terminals.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Marisol Figueroa
Art Unit 2617


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